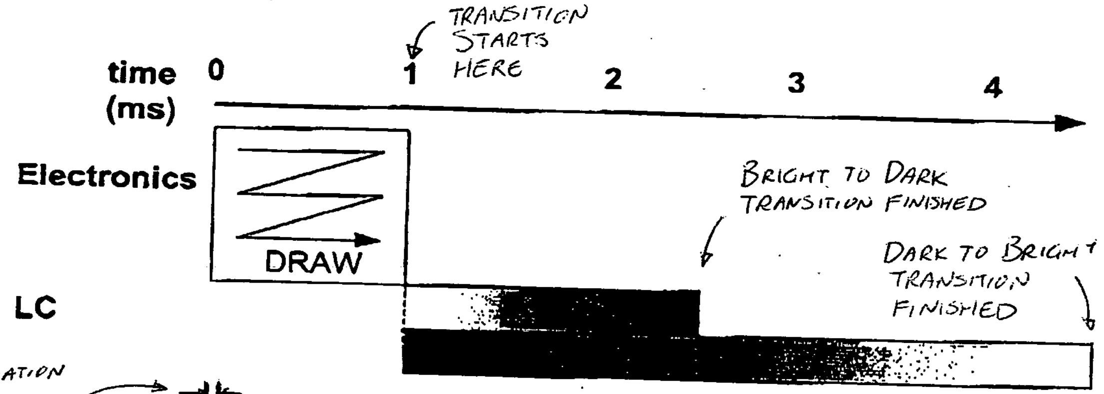

TRANSITION STARTS HERE
time (ms)
0
1
2
3
4
Electronics
DRAW
LC
BRIGHT TO DARK TRANSITION FINISHED
DARK TO BRIGHT TRANSITION FINISHED

FIG. 1A

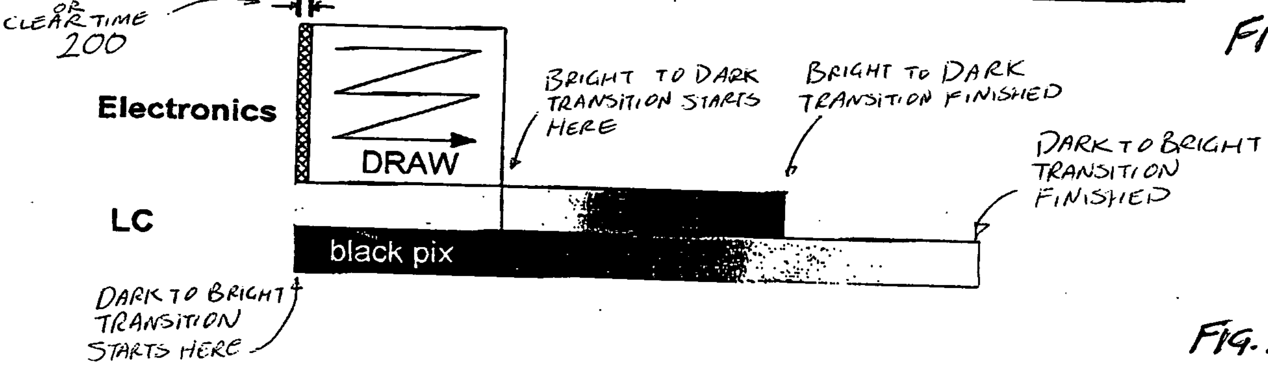

INITIALIZATION OR CLEAR TIME 200
Electronics
DRAW
LC
black pix
BRIGHT TO DARK TRANSITION STARTS HERE
BRIGHT TO DARK TRANSITION FINISHED
DARK TO BRIGHT TRANSITION FINISHED
DARK TO BRIGHT TRANSITION STARTS HERE

FIG. 2

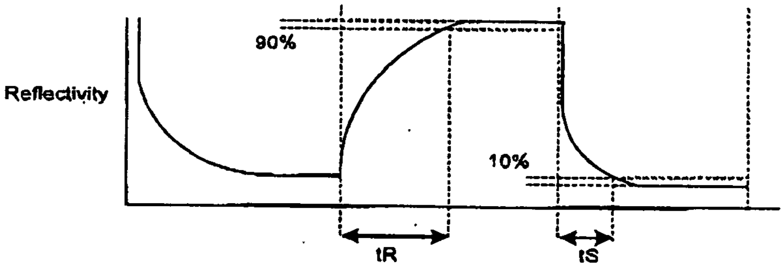


FIG. 1B

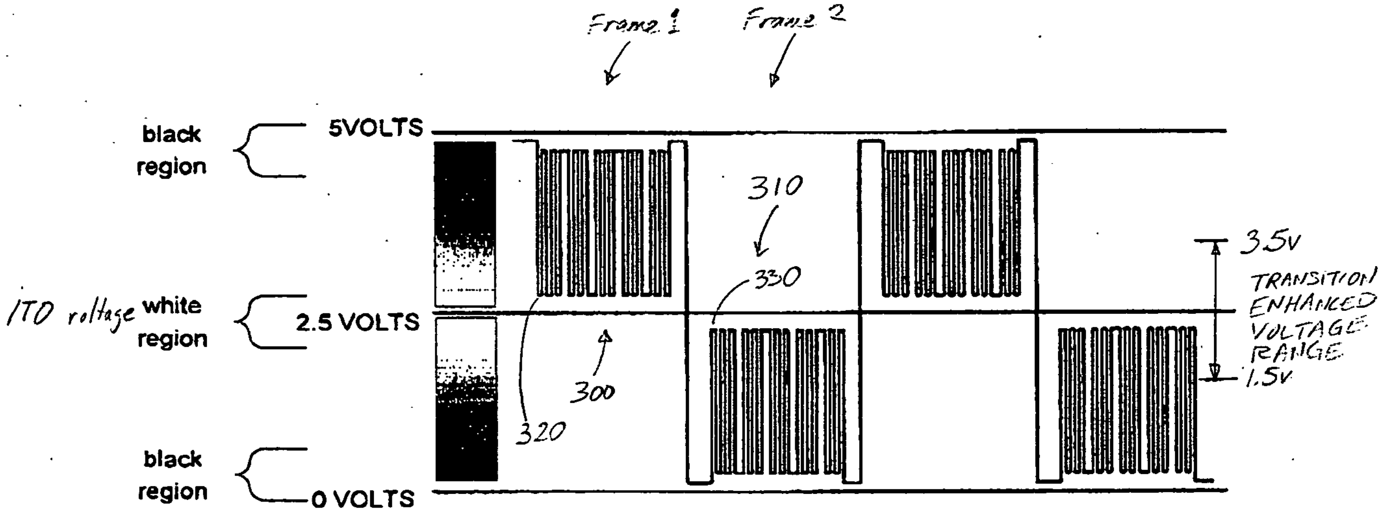

Frame 1
Frame 2
black region
5VOLTS
ITO voltage
white region
2.5 VOLTS
black region
0 VOLTS
310
330
300
320
3.5v
TRANSITION ENHANCED VOLTAGE RANGE
1.5v

FIG. 3

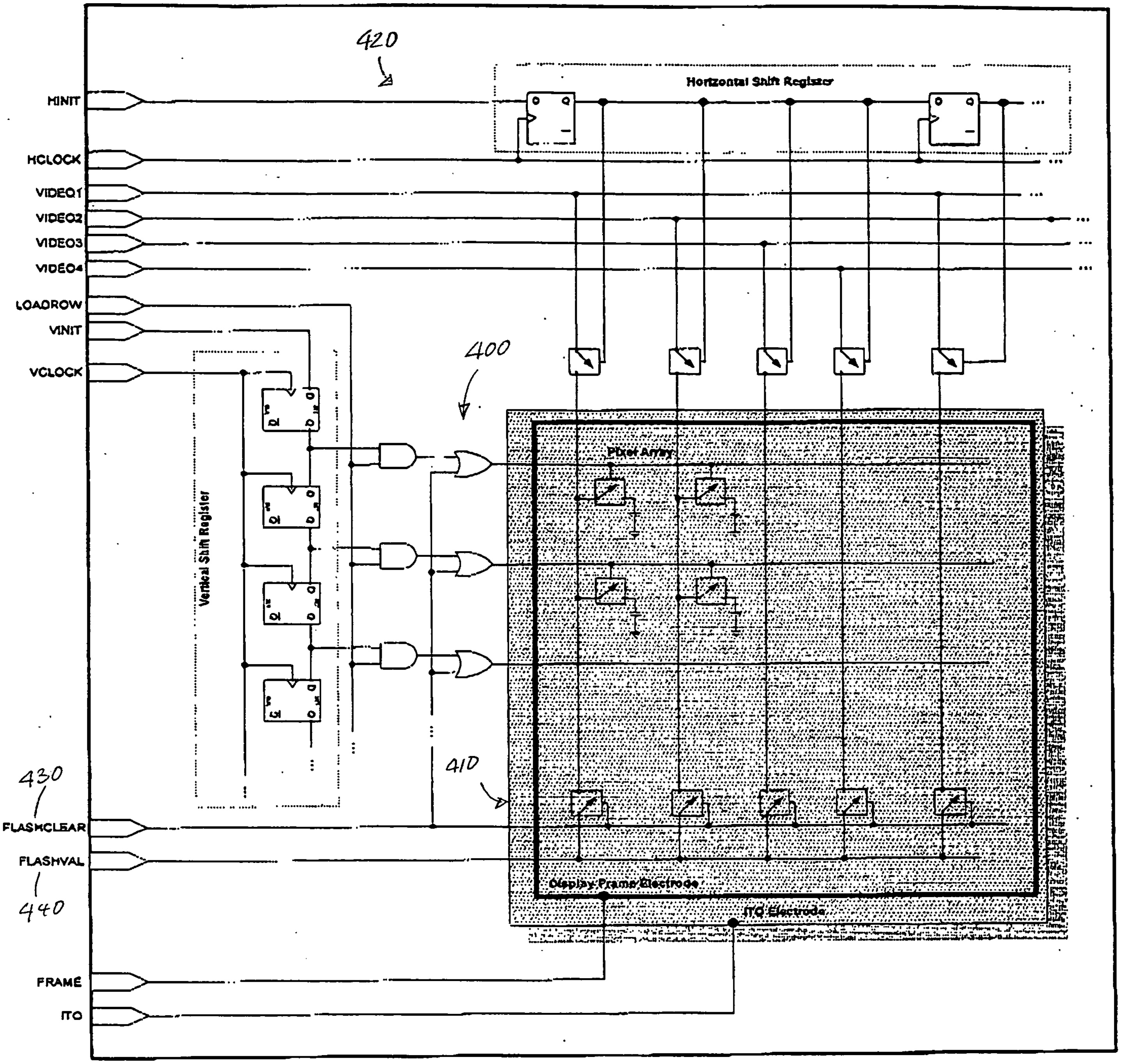
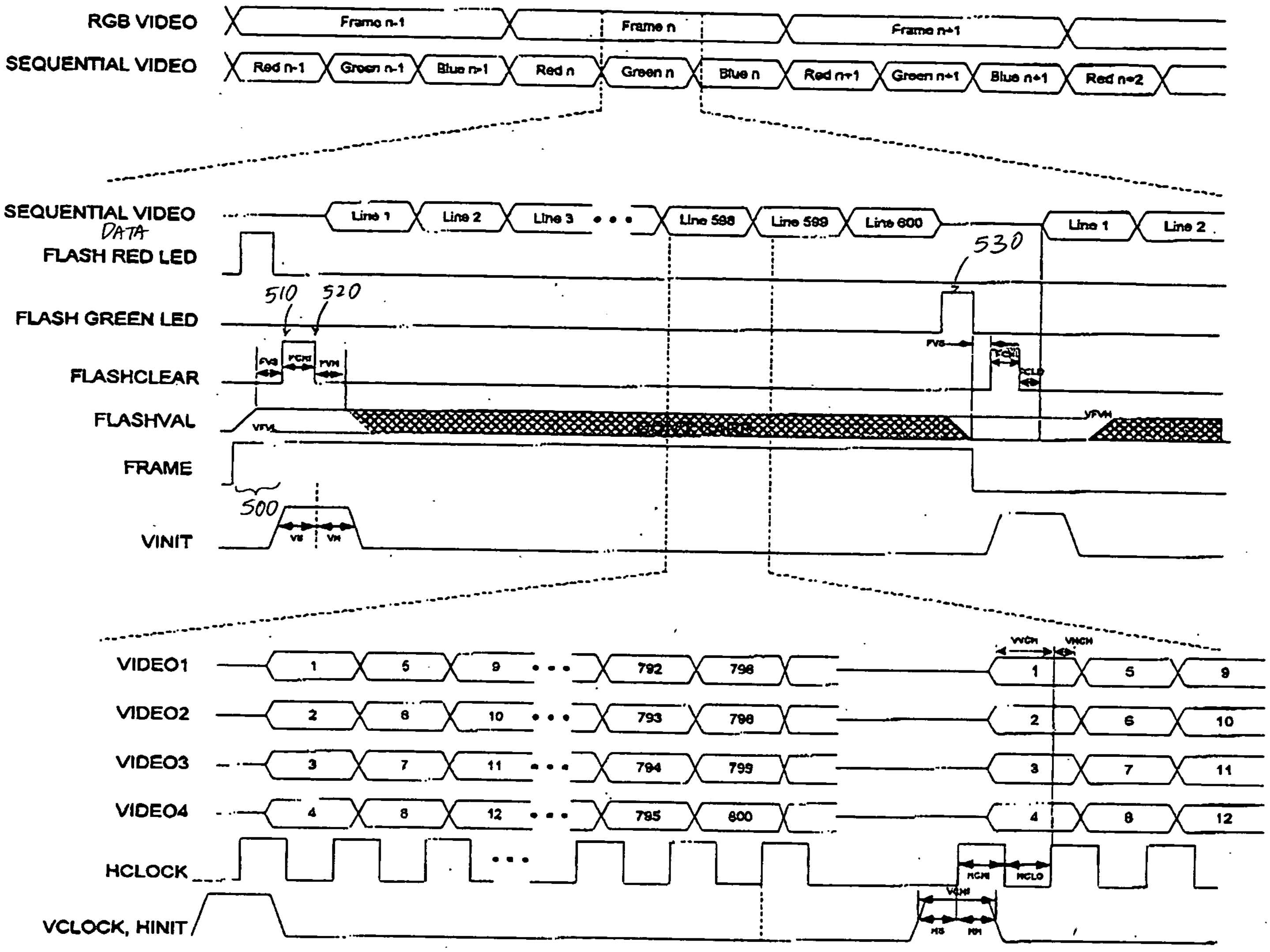

420
Horizontal Shift Register
HINIT
HCLOCK
VIDEO1
VIDEO2
VIDEO3
VIDEO4
LOADROW
VINIT
VCLOCK
400
Vertical Shift Register
Pixel Array
410
430
FLASHCLEAR
FLASHVAL
440
Display Frame Electrode
ITO Electrode
FRAME
ITO

FIGURE 4



Multi-bank Mode:
SBSEL = 0, LOADROW = 1

FIGURE 5

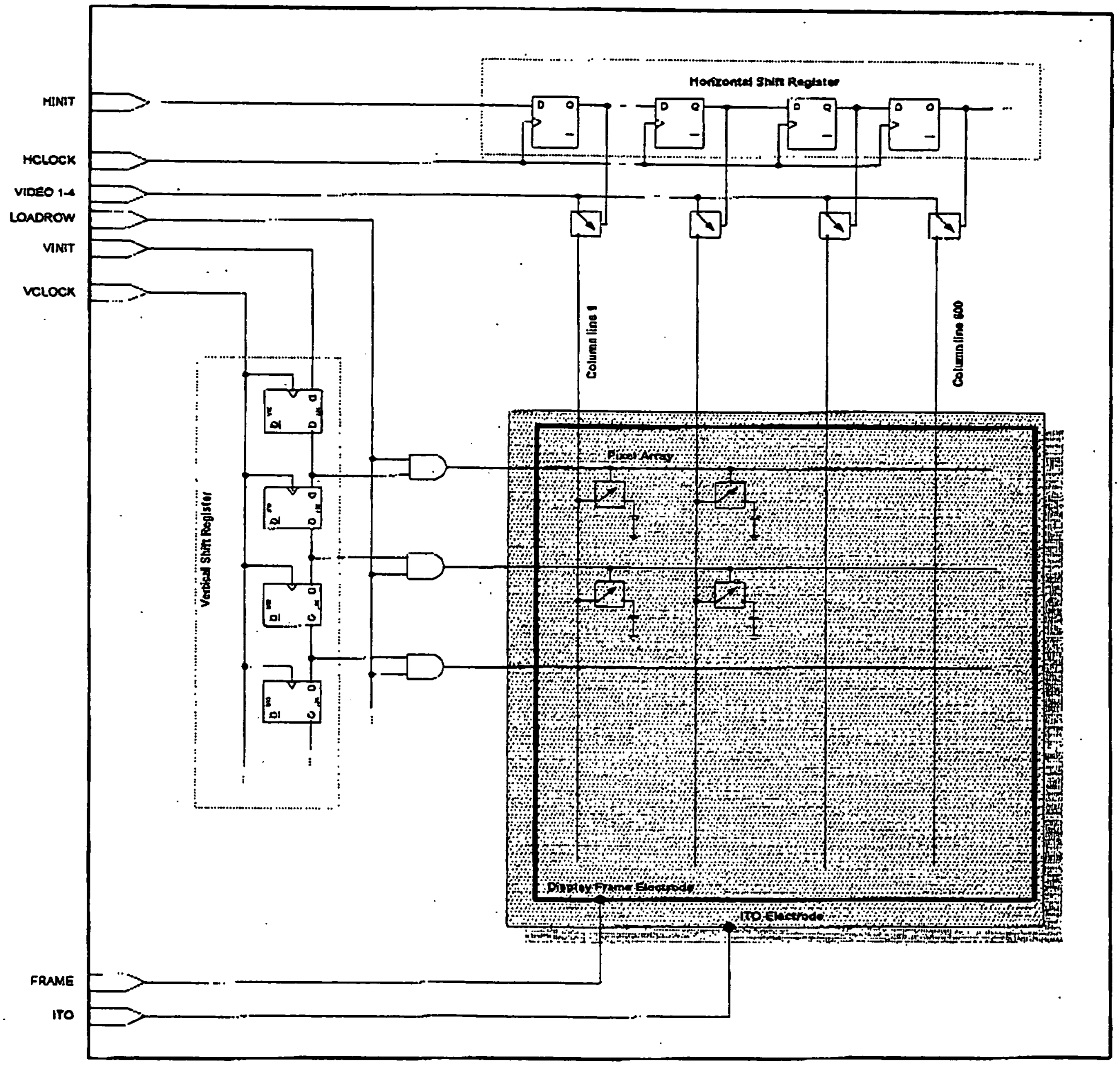
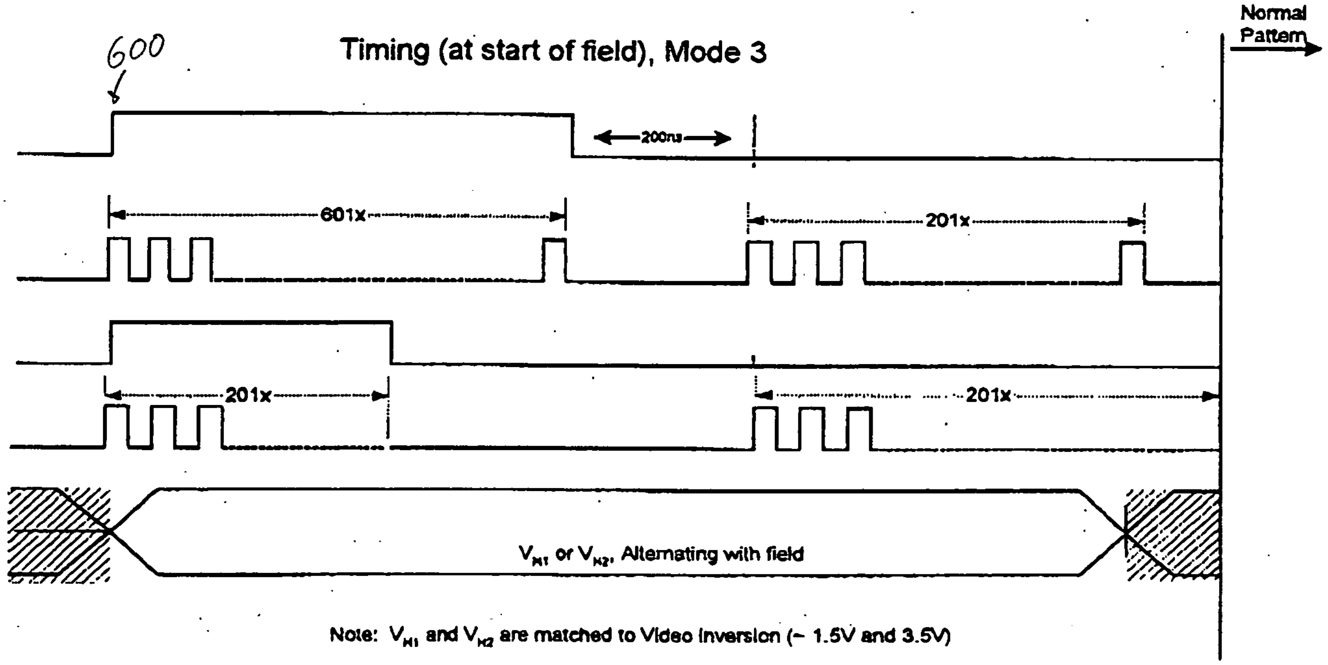

Horizontal Shift Register
HINIT
HCLOCK
VIDEO 1-4
LOADROW
VINIT
VCLOCK
D
Q
Column line 1
Column line 800
Vertical Shift Register
Pixel Array
Display Frame Electrode
ITO Electrode
FRAME
ITO

FIG. 6


Timing (at start of field), Mode 3

Note: V_{H1} and V_{H2} are matched to Video Inversion (~ 1.5V and 3.5V)

FIGURE 7